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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,151	02/14/2001	Lee Proctor	CE08880R	2078

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SCHAUMBURG, IL 60196

EXAMINER

HA, DAC V

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,151

Applicant(s)

PROCTOR ET AL.

Examiner

Dac V. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 2, 4, 7, 9** are rejected under 35 U.S.C. 102(e) as being anticipated by Niegel et al. (US 6,625,136) (hereinafter Niegel).

Regarding claim 1, Niegel teaches all the claimed subject matter “determining a transmission rate ... with the spreading code” in the Abstract; Col. 2, lines 38-52, 60-67; Col. 3, lines 8-11; Col. 4, lines 15-24; Col. 5, lines 35-38, 55-58; Col. 6, lines 10-13, 51-53, 60-67.

Regarding claim 2, Niegel teaches the claimed subject matter “wherein ... the transmission rate” in Col. 2, lines 41-52.

Regarding claim 4, Niegel further teaches the claimed subject matter “wherein ... spreading code” in Col. 6, lines 42-47.

Regarding claims 7, 9, see claims 2, 4 above, respectively.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 3, 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over
Niegel.

Regarding claim 3, Nielgel teaches all the claimed subject matter in claim 3, as
staed above. Nielgel further teaches the claimed subject matter "wherein ... full rate
transmission" as an obvious option Figure 2; Col. 9, line 59 to Col. 12, line 9.

Regarding claim 8, see claim 3 above.

5. **Claims 5, 6, 10-24** are rejected under 35 U.S.C. 103(a) as being unpatentable
over Nielgel in view of Gilhousen (US 5,751,761).

Regarding claim 5, Nielgel teaches all the claimed subject matter in claim 5, as
stated above, except for the claimed subject matter "wherein ... (vocoder) transmission
rate". However, Gilhousen, in the same field of endeavor, teaches that the use of a
vocoder is known in the art (Col. 2, lines 34-44; col. 14, lines 16-35). Therefore, the
claimed subject matter "wherein ... transmission rate" would have been optional to one
skilled in the art.

Regarding claim 6, Nielgel discloses only the transmitter side, which teaches the
claimed subject matter "determining a transmission rate ... upon the transmission rate"
in the Abstract; Col. 2, lines 38-52, 60-67; Col. 3, lines 8-11; Col. 4, lines 15-24; Col. 5,
lines 35-38, 55-58; Col. 6, lines 10-13, 51-53, 60-67. However, the process of
"dispreading" the received signal at the receiver side utilizing the corresponding

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spreading code would have been conventional to one skilled in the art. In particular, Gilhousen also teaches such conventional process in Col. 18, lines 19-38.

Regarding claim 10, see claim 5 above.

Regarding claim 11, Niegel teaches the claimed subject matter "wherein the spreading code ... rate"; "exclusive OR'ing ... spread data" in Abstract; Col. 2, lines 38-52, 60-67; Col. 3, lines 8-11; Col. 4, lines 15-24; Col. 5, lines 35-38, 55-58; Col. 6, lines 10-13, 51-53, 60-67; Col. 6, lines 42-47. Gilhousen teaches "a code generator" is conventional in the art in Figure 5, element 254.

Regarding claims 12-14, see claim 2, 3, 5 above.

Regarding claim 15, see claim 6 above. Further, the use of Viterbi decoder is widely known in the art and Gilhousen also teaches such use in Col. 16, lines 30-40 and Col. 17, lines 23-34. Thus, such claimed subject matter "a first ... rate determiner" would have been design choice based on the concept taught above by Niegel and Gilhousen.

Regarding claims 16-19, these claimed subject matter would have been obvious to one skilled in the art as optional.

Regarding claim 20, see claim 5 above.

Regarding claim 21, see claim 1 above and similar analogy as that in claim 15, the claimed subject matter "a convolutional encoder ... transmission rate" would have been obvious to one skilled in the art.

Regarding claim 22, Gilhousen further teaches "a block ... symbols" in Figure 5, element 251.

Regarding claims 23, 24 see claims 3, 5 above, respectively.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ziemer et al. (US 6,122,310) disclose a Method And Apparatus For Facilitating Multi-Rate Data Transmission By Selecting A Plurality Of Spreading Codes.

Giallorenzi et al. (US 6,091,760) disclose Non-Recursively Generated Orthogonal PN Codes For Variable Rate CDMA.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Dac V. Ha", written over a horizontal line.

Dac V. Ha
Examiner
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